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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,002	06/11/2004	Wu Qilian	17157-1	4001
23486	7590	07/08/2005	EXAMINER	
SHUTTLEWORTH & INGERSOLL, P.L.C. 115 3RD STREET SE, SUITE 500 P.O. BOX 2107 CEDAR RAPIDS, IA 52406			COHEN, AMY R	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/710,002

Applicant(s)

QILIAN, WU

Examiner

Amy R. Cohen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Decarolis et al. (U. S. Patent No. 5,820,057) in view of Caldwell (U. S. Patent No. 4,551,847).

Decarolis et al. discloses a tape measure (10) having a double-axis reel assembly comprising: a primary axis (Fig. 3); a primary spool (50) and a first gear (66) turnable together about the primary axis; a flexible measuring tape blade (52) wound upon the primary spool and normally in a fully retracted position on the primary spool (Col 3, lines 5-19); a secondary axis (Fig. 3); a secondary spool (84) and a second gear (86) turnable together about the secondary axis; the secondary spool having a self-restoring spring (80) wound around it; and a gear member (102) connecting the first gear and the second gear, whereby extension of the tape blade from its retracted position causes turning of the primary spool which in turn causes the turning of the secondary spool to place the spring of the secondary spool in a spring-wound condition which spring will cause retraction of the tape blade upon release of the tape blade from the extended position (Col 3, lines 5-45).

Decarolis et al. discloses the tape measure comprising a housing (10) for enclosing said primary spool and first gear, said secondary spool and second gear, and said gear member, the housing having a top (20), bottom (18), sides (12) and ends (16, 22) with the measuring tape

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blade having a portion extending outside one end of the housing (Fig. 1), said portion being adapted to be gripped by the user of the tape measure (56) so as to extend the tape blade from its normally retracted position (Figs. 1 and 2).

Decarolis et al. discloses the tape measure wherein the housing is oblong shaped (Figs. 1 and 2).

Decarolis et al. discloses the tape measure comprising a tape blade lock (30-44) combined with the housing and having an actuator (36) extending outside the housing for operation by the user to selectively maintain the measuring tape blade at a desired extended position during use (Col 3, line 58-Col 4, line 11).

Decarolis et al. discloses the tape measure in which the actuator of the tape blade lock extends from the same end of the housing as the measuring tape blade and is operable by the user to selectively engage and hold said measuring tape blade so as to maintain said measuring tape blade at a desired extended position during use (Fig. 1 and Col 4, lines 26-44).

Decarlois et al. discloses the tape measure in which the actuator has a lock that maintains the actuator in a locked position holding the measuring tape blade in an extended position when the actuator is released by user (Col 4, lines 26-44).

Decarolis et al. does not disclose the tape measure wherein the gear member is an endless flexible member connecting the first gear and the second gear.

Caldwell discloses a tape measure (10) comprising a primary axis (Fig. 1); a primary spool (24) and a first gear (36) turnable together about the primary axis; a flexible measuring tape blade (16) wound upon the primary spool and normally in a fully retracted position on the primary spool (Fig. 1); a secondary axis (Fig. 1); a secondary spool (32) and a second gear (34)

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turnable together about the secondary axis; and an endless flexible member (38) connecting the first gear and the second gear (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tape measure of Decarolis et al. to include an endless flexible member in place of the gear member, as taught by Caldwell, as an alternate transmission member of the turning of the gears and in order to be able to space the primary and secondary spools in alternate locations or farther apart from each other within the housing.

Regarding the proportions of the housing: Decarolis et al. and Caldwell disclose a tape measure and housing where the housing has proportions but does not specifically states a particular value for these proportions. However, to choose a housing proportion of 3: 1.5: 1 in length: width: height, absent any criticality, is only considered to be the "optimum" value of the housing proportions, as stated above, that a person having ordinary skill in the art would have been able to determine using routine experimentation based, among other things, on the desired accuracy and since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. See *In re Boesch*, 205 USPQ 215 (CCPA 1980). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the housing proportions be 3: 1.5: 1 in length: width: height, in order to more comfortably fit within the hand of the user and in order to maximize the amount of tape that the housing could hold.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Decarolis et al. and Caldwell as applied to claims 1-5, 8, 9 above, and further in view of Lin (U. S. Patent No. 6,182,916).

Decarolis et al. and Caldwell disclose the tape measure as described above in paragraph 2 and in which the actuator of the tape blade lock extends from the same end of the housing as the measuring tape blade and is operable by the user to selectively engage and hold said measuring tape blade so as to maintain said measuring tape blade at a desired extended position during use (Decarolis et al., Fig. 1 and Col 4, lines 26-44).

Decarolis et al. and Caldwell do not disclose the tape measure wherein the actuator of the tape blade lock extends outside one of the sides of the housing.

Lin discloses a tape measure (11) in which the actuator (30) of the tape blade lock extends outside one of the sides of the housing and is operable by the user to selectively engage and hold the primary spool thereby maintaining the measuring tape blade at a desired extended position as long as the actuator is held by the user (Figs. 2-4 and Col 2, line 53-Col 3, line 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tape measure of Decarolis et al. and Caldwell to have the actuator located on a side of the housing, as taught by Lin, so that a user could tentatively stop and hold the extended tape measure at a desired location with the user's thumb, making it more convenient to use (Lin, Col 1, lines 58-64).

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Decarolis et al. and Caldwell as applied to claims 1-5, 8, 9 above, and further in view of Seymour (U. S. Patent No. 6,643,948).

Decarolis et al. and Caldwell disclose the tape measure as described above in paragraph 2 and in which the actuator of the tape blade lock extends from the same end of the housing as the measuring tape blade and is operable by the user to selectively engage and hold said measuring

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tape blade so as to maintain said measuring tape blade at a desired extended position during use (Decarolis et al., Fig. 1 and Col 4, lines 26-44).

Decarolis et al. and Caldwell do not disclose the tape measure wherein the actuator of the tape blade lock extends from the bottom of the housing.

Seymour discloses the tape measure (10) in which the actuator (22) of the tape blade lock extends from the bottom of the housing and is operable by the user to selectively engage and hold the primary spool thereby maintaining the measuring tape blade at a desired extended position as long as the actuator is held by the user (Figs. 1-5 and Col 3, lines 13-27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tape measure of Decarolis et al. and Caldwell to have the actuator located on the bottom of the housing, as taught by Seymour, so that a user engage the brake with fingers making it a more convenient location (Seymour, Col 3, lines 13-27).

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents disclose tape measures Lin (U. S. Patent No. 6,715,214), Girtman (U. S. Patent No. 5,920,997), Millen (U. S. Patent No. 5,042,159), Church (U. S. Patent

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No. 4,569,490), Quenot et al. (U. S. Patent No. 4,189,107), Howell (U. S. Patent No. 6,673,694), and Klemm (U. S. Patent No. 2,668,036).

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy R. Cohen whose telephone number is (571) 272-2238. The examiner can normally be reached on 8 am - 5 pm, M-F.

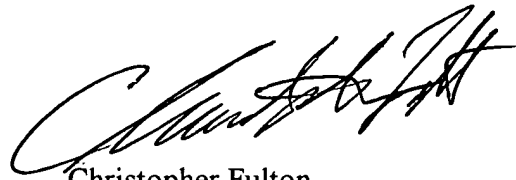
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARC  
July 6, 2005

A handwritten signature in black ink, appearing to read 'Christopher Fulton', is written over the printed name.

Christopher Fulton  
Primary Examiner  
Tech Center 2800